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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,430	12/20/2001	Kazunori Okano	NITT.0050	4376

7590

10/07/2003

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EXAMINER

DRODGE, JOSEPH W

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 10/07/2003

CLAIMS 56
51 and 52

Please find below and/or attached an Office communication concerning this application or proceeding.

should have
also been
indicated
allowable
was
10/28/03

Office Action Summary

Application No.

10/018,430

Applicant(s)

OKANO ET AL.

Examiner

Joseph W. Drodge

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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NON-FINAL REJECTION

Claims 1-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are replete with inconsistent terminology and terminology lacking antecedent basis; for instance, see "the upper part" and "the lower part" recited in most of the independent claims, claim 7 "the upper members of the frameworks" and claim 43 and other method claims "the loop shape trajectory". Also, language concerning "upper openings" in a plurality of the claims is confusing.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,5,8-10,12,31,32,47 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Shanley patent 3,211,368.

Shanley discloses as required within independent claims 1,8,31,47 and 48, a centrifugal separator 40 that comprises individual rotor assemblies (column 4, line 57-column 5, line 6 and figures 5-8), the rotor assemblies each having a single cavity/chamber 21/60 with an upper opening 27/37 (column 5, lines 17-25 and figure 1), members of two-part frameworks coupled to the openings (frameworks 64, column 5, lines 26-33 and column 6, lines 63-70), rotation driving means 52/53/54/55, the chambers 21 having unequal dimensions in the height, width and length directions (figure 1 and column 5, lines 2-6).

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Regarding claims 2 and 9, see sealing function of framework in column 6, lines 69-70.

Regarding claims 3 and 10, see means 30/31 for injecting liquid into the chambers, it being immaterial whether such liquid is a "sample" in apparatus claims.

Regarding claims 5 and 12, see figures 1,6, and 8 showing portions of the chambers 21 being relatively distant from the center of the rotors and hence having a relatively greater acceleration.

Regarding claims 31 and 32, see control means 56 governing the rotation driving means (column 4, lines 62-65, column 5, lines 60-62 and column 7, lines 22-42).

Claims 4,6,7,11,13,14,and 33-36 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 4 and 11 would distinguish in view of recitation of the sample separation chambers having concave portions with symmetric planes intersecting each other.

Claims 6 and 13 would distinguish in view of the lower parts of the rotors having lower openings (Stanley discloses movement of liquid into and also out of the chambers in the rotors through the upper openings).

Claims 7 and 14 distinguish in view of recitations of the rotors consisting of the upper members of frameworks which are fitted together.

Claims 33 and 34 would distinguish in view of recitation of the centrifugal rotors being disposed at transport devices moving on loop shape trajectories (Stanley only suggest the centrifuge and individual rotor means being stationarily mounted).

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Claims 35 and 36 would distinguish in view of recitation of transport devices moving on circular trajectories.

Claims 15-46, 49 and 50 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Claims 15-42 are all distinguished in view of recitations of the lower parts of the rotors having lower openings and/or the sample separation chambers having concave portions with symmetric planes intersecting each other.

Claims 43-46 would distinguish in view of recitation of a process step for moving the centrifugal rotors on the loop-shape trajectory.

Claims 49 and 50 would distinguish in view of recitations of vessels fixed in separation chambers having concave portions for holding solutions injected from the upper openings.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mitsumaki et al patent 5,104,807 is of interest with respect to claims 43-46 and teaches a process of preparing samples in centrifugal apparatus mounted on a turntable and having plural receiving chambers. Drucker patent 3,199,775 and Gerken et al patent 5,538,493 are of interest for recitation of plural rotors symmetrically arranged around the body of a main central rotor, each receiving tubular sample receiving cartridges.

Any inquiry concerning this communication or other matters regarding prosecution of this application should be directed to Examiner Joseph Drodge at

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telephone number (703) 308-0403 Mondays through Fridays between the hours of 8:30

AM and 4:45 PM. The Fax number for the examining group is (703) 872-9306.

JWD

September 18, 2003


JOSEPH DODGE
PRIMARY EXAMINER